Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Hampton Roads Sanitation District

Facility Name: Boat Harbor WWTP Facility Location: 300 Terminal Avenue

Newport News, Virginia\

Registration Number: 60351 Permit Number: VA-60351

April 5, 2006 Effective Date

April 4, 2011 Expiration Date

Director Department of Environmental Quality

Director, Department of Environmental Quality

April 5, 2006 Signature Date

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I. Facility Information

Permittee: Hampton Roads Sanitation District PO Box 5911 Virginia Beach, Va 23471

Responsible Official: Mr. D.R. Wheeler General Manager

Facility: Boat Harbor WWTP 300 Terminal Ave. Newport News, VA 23607

Contact Person: Mr. Mark Feltner Environmental Scientist 757-460-4254

County-Plant Identification Number: 51-700-00068

Facility Description: NAICS 221320 and 562219.

The Boat Harbor Plant provides both primary and secondary municipal wastewater treatment for the Hampton Roads area, serving mainly Newport News and Hampton clients. The Boat Harbor Plant is rated to treat a design maximum average dry weather flowrate of 25 million gallons per day (mgd) and sized to accommodate an instantaneous wet weather peak hour flowrate of 50 mgd. The facility process units are grouped into four main functions: liquids management, solids handling, sludge incineration, and other combustion units.

Liquids Management – all of the unit processes that treat the received wastewater prior to discharge to the James River. These unit processes include the septic tank truck unloading, Jefferson Avenue pump station, headworks (influent screening and pumping), grit removal chamber, aerobic influent distribution, aerobic reactors, primary and secondary clarification, chlorine contact basin and sodium bisulfite injection.

Solids Handling – unit processes that treat liquid treatment by-product streams before disposal. These unit processes include grit handling, raw and primary scum holding tank/concentrator, flotation thickener, primary and waste biosolids holding tank, biosolids day tank, dewatering centrifuges, biosolids screw conveyors, foreign biosolids storage and handling, biosolids belt conveyors, and ash storage/disposal.

Sludge Incineration – two identical multi-hearth incinerators are used to dispose of dewatered solids from the solids handling sections. Each incinerator has eight hearths, a dedicated induced-draft fan and an air-pollution control train consisting of a precooler, venture, and an impingement scrubber. The incinerators use either natural gas or fuel oil to supplement combustion.

Other Combustion Units – two electrical generators provide power for the entire plant if utility power is lost or it the Virginia Power Company requests the plant to reduce load. A small diesel solids-handling emergency generator supports incineration operations during a loss of power, and a distillate fuel burning heating boiler located in the administrative building.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	Pollutant Controlled	Applicable Permit Date
Incinerator	S					
I-1/I-2	2	Multi hearth sludge incinerators(natural gas or distillate oil as backup), 1973	15 burners rated at 2.7 MMBTU//hr each per incinerator. 43 dry tons/day (sludge) per incinerator	Pre-cooler with Venturi scrubber followed by impingement (tray) scrubber (water only). ARCO products Model No. VS-37-JS-2060. 1973	PM/PM-10 (Odor)	02/13/73
Liquids Ma	nageme	ent				
L-1	3a or 3b	Liquids Management, 1940	25 mgd (dry) (wastewater)	Two stage packed tower scrubber (water plus NaOCl and NaOH). Mass Transfer, Inc. Model Atlac 711-050. 1994.	(Odor)	
Plant Emer	gency (Generators				
G-3 G-4	5a 5b	Plant diesel engine electrical generators, 2000	15.5 MMBTU/hr (1500 kW) each			04/24/00
Solids Handling						
S-1	3a or 3b	Solids Handling, 1973	25 mdg (dry) (wastewater)	Two stage packed tower scrubber (water plus NaOCl and NaOH) Mass Transfer, Inc. Model Atlac 711-050. 1994.	(Odor)	

^{*}The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Incinerator Requirements – (I-1/I-2)

A. Limitations

Table III.A.1 Emission Limitations for Each Incinerator, I-1/I-2				
Regulated Pollutant	Limitation/Standard	Applicable Requirement	Reference EPA Test Method	
Нg	3200 grams/24-hour period	40 CFR 61, Subpart E, Para 61.52 (b)	Method 101A, 105, or 29	
PM	Less than 0.14 grains/dscf at 12% CO2	NSR permit condition 4.iii issued 02/13/1973	Method 5 and 202	

1. **Fuel** - The approved fuels for the incinerators are natural gas and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils." A change in the fuels may require a permit to modify and operate.

(9 VAC 5-80-110 and Condition 4 of NSR permit issued 2/13/73)

2. **Emissions** - Emissions from the operation of each incinerator (I-1/I-2) shall not exceed the limits specified in Table III.A.1.

(9 VAC 5-80-110, 9 VAC 5-40-750, Condition 4.iii of NSR permit issued 02/13/73, and 40 CFR 61 Subpart E, Para. 61.52 (b))

- 3. **Visible Emission Limit** Visible Emissions from the incinerator stack shall be less than 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Apendix A). This condition applies at all times except during startup, shutdown and malfunction.
 - (9 VAC 5-80-110, 9 VAC 5-50-80 and Condition 4.ii of NSR permit issued 02/13/73)
- 4. **Plant Changes** No changes can be made to the plant operations, after a stack test or sludge test has been conducted which would potentially increases mercury emissions above the level determined by the most recent test, until the new emission level has been estimated by calculations and the results reported to EPA and DEQ.
 - (9 VAC 5-80-110, 9 VAC 5-60-70, and 40 CFR 61 Subpart E, Para. 61.53(d)(4) and 61.54(e))

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B. Monitoring

- 1. **Fuel Certification** The permittee shall obtain a certification from the fuel supplier for each shipment of distillate oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier;
 - b. The date on which the oil was received;
 - c. The volume of distillate oil delivered in the shipment;
 - d. A statement that the oil complies with the American Society for Testing and materials specifications for fuel oil/diesel oil numbers 1 or 2.
 - (9 VAC 5-80-110 and Condition 4 of NSR permit issued 02/13/73)

2. CAM for PM:

MONITORING APPROACH FOR EACH INCINERATOR IN OPERATION

Indicators	Minimum water flow rates for precooler, venturi & impingement wet scrubber.		
Measurement	Water flow rate via rotometer/vortex/magmeters.		
Approach			
	An excursion when any average water flow rate is below:		
Indicator Ranges	Precooler 29 gpm		
mulcator Ranges	Venturi 24 gpm		
	Impingement 95 gpm.		
Data	Inflow water meters for each piece of equipment.		
Representativeness			
Response to	Maintenance will respond within two hours to make		
excursions	adjustments/repairs.		
QA/QC	Zero flow check on each water flow meter for each		
QA/QC	incinerator cold start-up.		
	Water flow rate continuously measured by each meter;		
Monitoring Frequency	scale range is appropriate for each water flow meter as		
	designated by the manufacturer.		
Data Collection	Water flow rate is recorded (clock) hourly for each meter.		
Procedures			
Averaging Period	Three (clock) hours average for each water meter (up to		
Averaging Period	eight 3-hr averages per calendar day).		

(9 VAC 5-80-110 and 40 CFR 64)

3. **Visible Emissions Evaluations** – The permittee shall observe the incinerator stack for the operating incinerator (I-1/I-2) one day during daylight normal operations within the first seven operating days of each month. If visible emissions are noted, a visible emissions evaluation (VEE) shall be conducted for at least six (6) minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE average for the six (6) minute period exceeds ten (10) percent, the VEE shall continue for one hour from initiation.

(9 VAC 5-80-110)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- 1. All fuel supplier certifications;
- 2. Any sludge test or stack test results for mercury emissions;
- 3. Any stack test results for PM emissions from the tested incinerator with those PM emission factors used for making emission estimates from both incinerators unless emission factors are established for each incinerator by its own stack test;
- 4. Incinerator visible emissions observations and VEE records;
- 5. PM CAM monitoring records;
- 6. Operating procedures, maintenance records, and operator training records;
- 7. Daily (monthly average) dry ton biosolids feed rate to active incinerator(s).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

D. Testing

- 1. **PM Stack Testing** A stack test for particulate matter emissions shall be conducted on one incinerator (I-1 or I-2) within 60 days after either incinerator exceeds a 43 dry ton/day (the calendar monthly average) biosolids feed rate to determine compliance with the permit emission limits (**Table III.A.1**). If the stack test results for I-1 or I-2 show that PM emissions exceed 0.11 grains/dscf, the second incinerator must be stack tested within 12 months of the initial stack test. The test(s) shall be conducted, reported, and data reduced as set forth in 9 VAC 5-50-30, and test methods and procedures contained in EPA Method 5 and 202. The details of the test(s) are to be arranged with and approve prior to testing by the Director, Tidewater Regional Office. (9 VAC 5-80-110)
- 2. **Mercury Testing For Plant Changes** If plant changes project mercury emissions to exceed 1,600 grams/24-hr period, a test for the level of mercury emissions from one incinerator (I-1 or I-2) shall be conducted within 60 days after the changes have been implemented. The sludge shal be tested for mercury levels using Method 105 of 40 CFR 61, Appendix B and following the requirements of 40 CFR 60.54(c) through 60.54(d), or an incinerator stack test performed using Method 101 A of 40 CFR 61, Appendix B and following the requirements of 40 CFR 60.53(d)(4) or Method 29 of 40 CFR 60, Appendix A. The details of the test(s) are to be arranged with and approved prior to testing by the Director, Tidewater Regional Office.

 (9 VAC 5-80-110 and 40 CFR 60, Para, 61.55(a))
- 3. **Additional Testing Methods** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
Mercury	EPA Methods 101A, 105, or 29
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

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E. Reporting

1. **Stack Test Protocol-** Submission of the test protocol for the proposed incinerator particulate matter stack test shall be sent to the Director, Tidewater Regional Office at least 30 days prior to the test date.

(9 VAC 5-80-110)

2. **Stack Testing Date -** Notification of proposed stack test date(s) for particulate matter shall be sent to the Director, Tidewater Regional Office at least 30 days prior to testing date(s).

(9 VAC 5-80-110)

3. **Stack Test Results Report** - One copy of the particulate matter test results report for the incinerator shall be sent to the Director, Tidewater Regional Office within 45 days of test completion.

(9 VAC 5-80-110)

4. **Proposed Plant Changes -** Notification of proposed changes to the plant operations which would potentially increase mercury emissions above the level determined by the most recent test under 40 CFR 61, Subpart E shall be sent at least 30 days prior to implementing such changes along with the new calculated mercury emissions to the Director, Tidewater Regional Office and EPA.

(9 VAC 5-80-110 and 40 CFR 61, Subpart E, Para 61.53(d)(4) & 61.54(e))

5. **Any Mercury Tests Conducted for 40 CFR 61, Subpart E -** Notification of proposed stack test date(s) or sludge sampling date(s) for mercury emissions shall be sent to the Director, Tidewater Regional Office and EPA at least 30 days prior to testing dates.

(9 VAC 5-80-110 and 40 CFR 61, Subpart E, Para 61.53(d) and 61.54(b))

6. Any Mercury Tests Conducted for 40 CFR 61, Subpart E - The stack test determination or sludge test determination for mercury emissions shall be completed within 30 days of sample collection. Each mercury emissions determination shall be dispatched within 15 calendar days of determination via registered letter to Director, Tidewater Regional Office and EPA.

(9 VAC 5-80-110 and 40 CFR 61, Subpart E, Para 61.53(d) and 61.54(f))

7. **Notices for EPA** – Notices for EPA will be sent to:

U.S. EPA, Region III Air Protection (3AP12) Attn: 40 CFR 61 Subpart (E) Coordinator 1650 Arch Street Philadelphia, PA 19103-2029 (9 VAC 5-80-110)

IV. LIQUIDS MANAGEMENT – (L-1)

A. Limitations

1. **Visible Emission Limit** - Visible emissions from each scrubber stack (stack 3a and 3b) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-50-80 and 9 VAC 5-80-110)

V. ELECTRICAL GENERATORS – (G-3/G-4)

A. Limitations

- Fuel The approved fuel for the diesel engine electrical generators is distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils." A change in the fuels may require a permit to modify and operate. Maximum sulfur content per shipment:

 0.5%
 VAC 5-80-110 and Condition 4 of NSR permit issued 04/24/00)
- 2. **Fuel Throughput** The diesel engine electrical generators shall consume no more than 110,000 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110 and Condition 4 of NSR permit issued 04/24/00)
- 3. **Visible Emission Limit** Visible emissions from each diesel engine electrical generator stack, shall not each exceed 10 % opacity except during one six (6) minute period in any one hour in which visible emissions shall not exceed 20 % opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-80-110 and Condition 7 of NSR permit issued 04/24/00)

4. **Emission Limits** - Emissions from the operation of each diesel engine electrical generator shall not exceed the limits specified below:

PM/PM-10	1.6 lbs/hr
Sulfur Dioxide	7.8 lbs/hr
Nitrogen Oxides	49.6 lbs/hr
(as NO ₂)	
Carbon Monoxide	13.2 lbs/hr

Carbon Monoxide Volatile Organic

Compounds 1.2 lbs/hr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these nominal emission limits may be determined as stated in Condition numbers V.A.1, 3, V.B.1, and V.C.

(9 VAC 5-80-110 and Condition 5 NSR permit issued 04/24/00)

5. **Emission Limits** - emissions from the operation of the diesel engine electrical generators (combined) shall not exceed the limits specified below:

PM/PM-10	0.8 ton/yr
Sulfur Dioxide	4.0 tons/yr
Nitrogen Oxides	24.8 tons/yr
(as NO ₂)	
Carbon Monoxide	6.6 tons/yr
Volatile Organic	
Compounds	0.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these nominal emission limits may be determined as stated in Condition numbers V.A.1, 2, 3, V.B.1, and V.C.

(9 VAC 5-80-110 and Condition 6 NSR permit issued 04/24/00)

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B. Monitoring

1. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier for each shipment of distillate oil. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier;
- b. The date on which the distillate oil was received;
- c. The volume of distillate oil delivered in the shipment;
- d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications for fuel oils/diesel fuels numbers 1 or 2.
 (9 VAC 5-80-110)
- 2. **Visible Emissions** The permittee shall observe each generator stack (stack 5a and 5b) for visible emissions when the generator is under full plant load during the time period of the first routine maintenance that is performed after each 500 hours of operations for each generator. If visible emissions are noted, a visible emissions evaluation (VEE) shall be conducted for at least six (6) minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the initial six (6) minutes exceeds five (5) percent, the VEE shall continue for one hour from initiation. (9 VAC 5-80-110 and Condition 8 of NSR permit issued 04/24/00)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- 1. The annual amount of distillate fuel for the diesel engine generators (combined), calculated monthly as the sum of each consecutive 12-month period;
- 2. All fuel supplier certifications;
- 3. Visible emissions checks and visible emissions evaluations for each generator;
- 4. Operating procedures, maintenance records, and operator training records;
- 5. Operating hours of each electrical generator (G-3,& 4) to determine when the required VEE in Condition V.B.2 should be conducted;

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 11 of NSR permit issued 04/24/00)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-80-110 and Condition 3 of NSR permit issued 04/24/00)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
SO_2	EPA Methods 6
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

VI. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission	Emission Unit	Citation	Pollutant(s) Emitted	Rated Capacity
Unit No.	Description		(9 VAC 5-80-720 B)	(9 VAC 5-80-720 C)
ISU-CB-24	Solids Handling Emergency Generator	5-80-720 C.4.b	N/A	66 HP (80 kW)
ISU-CB-25	2 Incinerator bldg. space heaters (natural gas)	5-80-720 C.2.a	N/A	0.02 MMBTU/hr (each)
ISU-CB-26	Admin. Bldg. Heating Boiler	5-80-720 B.1	PM, SO ₂ , NO _x , CO, VOC	1.3 MMBTU/hr
ISU-T-1	Solids Handling distillate oil AST	5-80-720 B.2	VOC	25,000 gal. (installed prior to 1984)
ISU-T-2	Solids Handling distillate oil AST	5-80-720 B.2	VOC	25,000 gal. (installed prior to 1984)
ISU-T-3	Solids Handling diesel AST	5-80-720 B.2	VOC	250 gal.
ISU-T-4	Liquids Management distillate oil UST	5-80-720 B.2	VOC	15,000 gal. (installed after 1984 – NSPS exempt)
ISU-T-5	Liquids Management distillate oil UST	5-80-720 B.2	VOC	1,000 gal.
ISU-T-6	Liquids Management distillate oil UST	5-80-720 B.2	VOC	2,000 gal.
Solids Handling	Unit processes for solid by-products sent to incinerators	5-80-720 B.2	VOC	25 mgd (dry)

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart O	NSPS for Sewage	Incinerator that charges more than
	Treatment Plants	2,205 lb/day of municipal sewage
		sludge (dry basis)
40 CFR 61 Subpart C	NESHAPS for Beryllium	Incineration of Beryllium wastes
40 CFR 60 Subpart Kb	NSPS for Volatile Organic	New and reconstructed tanks after
	Storage Vessels	07/23/84 with a capacity at or
		over 75 m ³ (19,812.75 gal.) and
		less than 151 m ³ (39,889.67 gal.)
		with vapor pressure at or above
		15.0 kPa
40 CFR 63 Subpart VVV	NESHAPS for POTWs	New and reconstructed major
		HAPs POTWs

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

VIII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."
 (9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.
- 7. One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U. S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029. (9 VAC 5-80-110 K.5)

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E. Permit Deviation Reporting

The permittee shall notify the Director, Tidewater Region within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VIII.C.3. of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Region.

(9 VAC 5-20-180 C and Condition 10 of NSR permit issued 04/24/00)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

- 1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

 (9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

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N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

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Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- (9 VAC 5-80-110 K.2 and Condition 13 of NSR permit issued 04/24/00)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

- No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

- d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- e. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- f. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C, 9 VAC 5-80-260 and Condition 16 of NSR permit issued 04/24/00)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

IX. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

Odor - 9 VAC 5-40-140 and 9 VAC 5-50-140

State toxics rule – 9 VAC 5-60-220 and 9 VAC 5-60-320

Existing Source Standards for Hydrogen Sulfide – 9 VAC 5-40-290 (9 VAC 5-80-110 N and 9 VAC 5-80-300)